



Hawaii Hurricane Relief Project

Full Mitigation Best Practice Story

State-wide, Hawaii

Kauai, HI - On September 11, 1992, Hurricane Iniki hit the island of Kauai, Hawaii, with wind speeds exceeding those of Hurricane Iwa (1982) and Dot (1959). Iniki (a category 4 hurricane) was the strongest and most destructive hurricane to hit the Hawaiian Islands in recorded history. The total economic impact to Kauai and the state exceeded \$2 billion. About 80% of Kauai operated without electricity for two weeks after the event. All of Kauai Electric's 24,469 customers were affected.



Approximately one fifth of the 20,000 homes on Kauai sustained major damage or were destroyed. Most hotels, government and commercial buildings sustained damage. Educational, medical and industrial areas were extensively damaged. Insured losses reached \$1.6 billion. At that time that was considered to be the third largest single insurance loss on record.

As a result of the catastrophic losses from Iniki, many insurance companies did not have financial reserves to adequately cover their policyholders. This resulted in a decision by insurers to stop offering homeowners policies and forced 40,000 policyholders statewide to purchase expensive insurance policies priced four to five times higher than premiums charged before the hurricane. For some, coverage was unavailable and many homeowners were not able to meet insurance requirements of mortgage lenders.

In response to this crisis, the Hawaii Hurricane Relief Fund (HHRF) was created by the state legislature in 1993 as a temporary measure to provide hurricane insurance for homeowners in Hawaii. As of January 1, 1999, the HHRF provided hurricane coverage for approximately 155,000 policyholders statewide.

In 1996, the HHRF created and implemented a hazard mitigation program that encourages homeowners to strengthen their homes against hurricanes by offering incentives in the form of reduced premiums. For example: a credit of 10% is given for installation of a new roof with wall connections hardware. A 10% - 12% credit is given for wall to foundation connections. A 15% - 18% credit is given for installing opening protection systems including storm shutters.

The program also recognizes superior construction that meets or exceeds wind speed requirements of current building codes.

A comparison study of government operated property insurance providers indicated that the HHRF rated second behind the National Flood Insurance Program for coverage and mitigation activities.

Other programs, such as the State Hazard Mitigation Forum and Project Blue Sky, were developed in Hawaii for hazard mitigation. The forum consists of representatives from private businesses and government agencies charged with public awareness and reducing the state's exposure to catastrophic occurrences.

Project Blue Sky, another awareness program, is a coalition of businesses that sell mitigation products at a discount and offer workshops to teach people how to strengthen their buildings.

Due to increasing awareness and need for hazard mitigation, new building codes have been adopted for wind resistance. New businesses have been created to develop and install mitigation products such as storm shutters, anchoring/cable systems, and other hardware designed to strengthen structural extensions. As a result, contractors are informed about hazard mitigation and are available to install wind resistant products on new and existing homes.

The increased cost of construction and the additional costs of retrofitting are a small payment if, after an event, the losses are substantially reduced. Insurance company projections indicate that installing storm shutters alone would reduce insured losses by 50%.

Following Iniki, the HHRF hazard program has been instrumental in motivating policyholders to strengthen their homes. As of December 1998, more than 4,000 policyholders have participated in the program.

HHRF is enhancing its hazard mitigation program by increasing credits and lowering insurance premiums. A public awareness campaign is underway. Insurance companies have begun to underwrite the hurricane peril once again in Hawaii. Most insurance companies elected not to participate with HHRF in the future have adopted similar rating and incentive programs for their hazard mitigation activities.

Activity/Project Location

Geographical Area: **State-wide**

FEMA Region: **Region IX**

State: **Hawaii**

Key Activity/Project Information

Sector: **Public**

Hazard Type: **Hurricane/Tropical Storm**

Activity/Project Type: **Education/Outreach/Public Awareness; Retrofitting, Structural**

Activity/Project Start Date: **01/1993**

Activity/Project End Date: **Ongoing**

Funding Source: **Local Sources; Private funds; State sources**

Funding Recipient: **Property Owner - Residential**

Funding Recipient Name: **Hawaii's property owners**

Activity/Project Economic Analysis

Cost: **Amount Not Available**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**

Federal Disaster #: **961 , 09/12/1992**

Value Tested By Disaster? **Unknown**

Repetitive Loss Property? **No**

Reference URLs

Reference URL 1: **<http://www.floodsmart.gov/floodsmart/pages/index.jsp>**

Reference URL 2: **<http://www.nhc.noaa.gov/>**

Main Points

- Hawaii Hurricane Relief Project(HHRF) was established following severe hurricane losses and the decision by insurers to not insure against hurricanes.
- In 1996, the HHRF created and implemented a hazard mitigation program that encourages homeowners to strengthen their homes against hurricanes by offering incentives in the form of reduced premiums.
- A comparison study of government operated property insurance providers indicated that the HHRF rated second behind the National Flood Insurance Program for coverage and mitigation activities.
- The HHRF hazard program has been instrumental in motivating policyholders to strengthen their homes.
- Insurance companies have begun to underwrite the hurricane peril once again in Hawaii.